



**ATLONA**  
Connecting technology to your world

# 4 x 2 Component Matrix Switcher with Digital/Analog Audio

AT-COMP-42M

User Manual



# AT-COMP-42M

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### INTRODUCTION

Atlona Technologies' AT-COMP-42M is one of the most innovative Component Video Matrix switcher with Digital/Analog Audio on the market. The AT-COMP-42M has 4 Component /Optical/Digital Coax and Stereo Audio inputs and 2 outputs.

Because it is a matrix switch, any input can be routed to any output; and the same input can be routed to all outputs or any other combination. This switch is ideal for connecting sources including: (VCRs, Camcorders, Video Game Consoles, DVDs, Satellite Receivers, Set Top Boxes, Apple TV, etc.) to desired displays such as: (HDTV, LCDs, Plasma Monitors, Video Projectors, etc.) Selection of inputs can be achieved manually through the front panel, infrared remote control or RS232 serial control. AT-COMP-42M is capable of flawless and crystal-clear distribution of all HDTV video formats up to 1080p as well as digital and analog audio signals.

### FEATURES:

- 4 inputs to 2 outputs (Matrix Switcher)
- Supported Signals:
  - Video: Component YPbPr/YCbCr/RGB+HV or Composite
  - Digital: Coaxial S/PDIF Digital Audio (PCM)
  - Optical: Toslink
  - Audio: Stereo Audio
- Support RS232 interface (comes with control software)
- Control through IR remote control, from front panel buttons or RS232
- Video Bandwidth : 250MHz, Maximum 325MHz
- Digital Video Bandwidth : 110MHz
- Digital : Coaxial(S/PDIF) Digital Audio (PCM) 10Mbps
- Optical (S/PDIF) in/out: Toslink (PS:OC3=STM1=155.52 Mbps)
- Audio : Stereo Audio
- Resolutions: 480p, 576p, 720p, 1080i 50/60, 1080p 50/60
- Supports 50Hz or 60Hz ( PAL/NTSC )
- Included 19 inch Ear mounts

### PACKAGE CONTENTS:

- AT-COMP-42M Matrix Switcher x 1
- Instruction Manual x 1
- Universal AC Adapter : 12VDC
- RS 232 Software CD x 1
- Rack Mount ears (pair) x 1

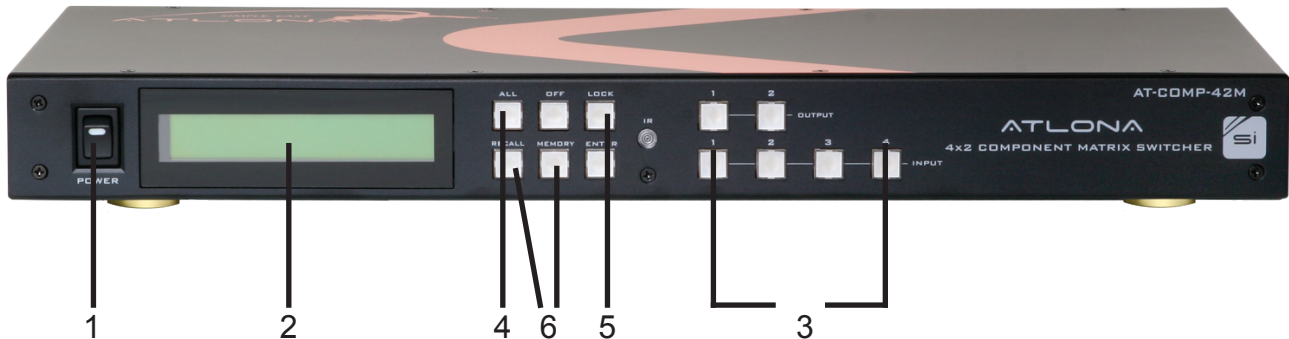
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### PANEL DESCRIPTIONS

#### Front Panel



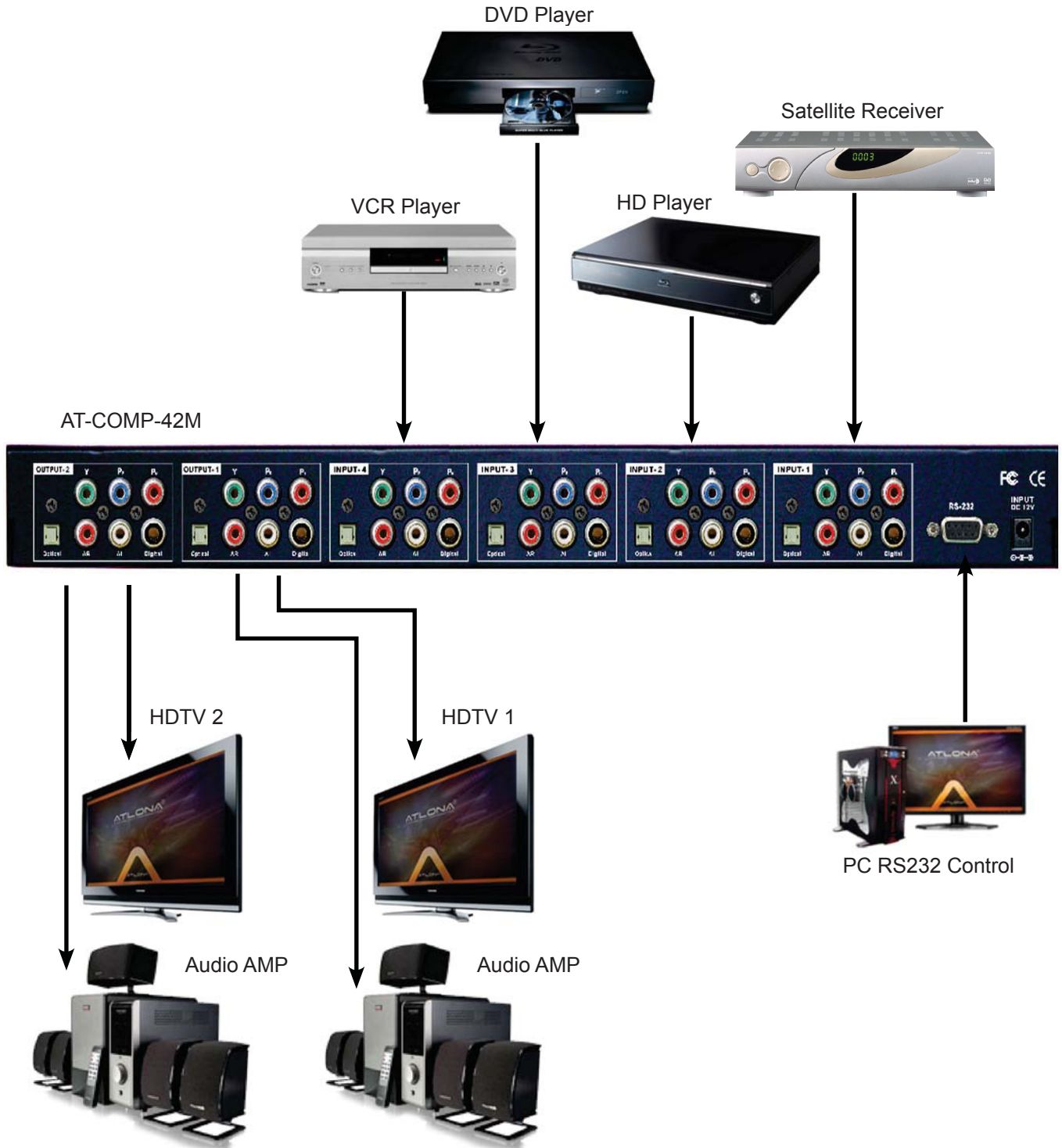
- 1. Power switch:** Press top of power switch to turn on. LED will illuminate red to indicate the switcher is receiving power. Press bottom of power switch to turn power off.
- 2. LCD display:** Confirmation and status of each key selection is displayed on the LCD readout.
- 3. Keypad (bottom input/top output):** Used to select individual output/input channels or to save/recall preset commands.  
Example: Select output channel from the top row of 1-2 keys followed by the input channel from the bottom row of 1-4 keys. To restore, press OFF key again or select the input to an output again.
- 4. ALL Key:** To transfer an input channel to all output channels or to switch off all input channels.  
Example: To transfer an input to all outputs: Select the ALL key, then select an input followed by the ENTER key.  
Example: To switch off ALL output channels: Select OFF then select ALL followed by the ENTER key. To restore, press the OFF key again or select the input to an output.
- 5. LOCK Key:** Press and hold the LOCK key for 3 seconds to lockout all keypad functionality. Pressing the LOCK key again will restore keypad functionality.
- 6. Memory/Recall Keys:** Used to store or recall presets for inputs and outputs.  
Example: Select the desired output and input combination for each audio/video zone you wish to store as a preset. Select the MEMORY key followed by a preset location from the bottom row of numbered keys. Selecting the ENTER key will save the preset memory position.  
Example: To recall a preset select the RECALL key, then the number of the memory preset followed by the ENTER key.

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## CONNECTION and INSTALLATION



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## SPECIFICATIONS

Input / Output	Optical. RX VS TX 13.2Mbps(NRZ Signal)10K $\Omega$ Digital : Digital Audio(S/PDIF), Composite Video Stereo Audio (10K $\Omega$ / 6Vp-p)
Video Bandwidth	>250Mhz, Maximum 325MHz (-3db), Full Load.
HDTV Scan Rate	480I, 480P, 576P, 1080I, 720P, 1080P
Digital Bandwidth	>110Mhz
Audio Frequency Respond	20Hz ~20KHz, + 0.05db.
Supported Signals	Component Video (YUV, RGB, YPrPb, YCrCb) Optical Digital (S/PDIF) Stereo Audio (AR/AL)
Channel switch time	25ns
Industrial Temp. Range	-40 <sup>o</sup> C to +85 <sup>o</sup> C
Hostile Crosstalk	-83db @ 5MHz.
Dimensions (W.D.H.)	17.32" (W) x 7.80" (D) x 1.23" (H)
Net Weight (Unit Only)	3 lb.
Power Consumed	DC+12V, @500mA~2000mA, 6 Watt (max.)

## IR CODES

IR Codes (NEC Format for use with universal remote control):

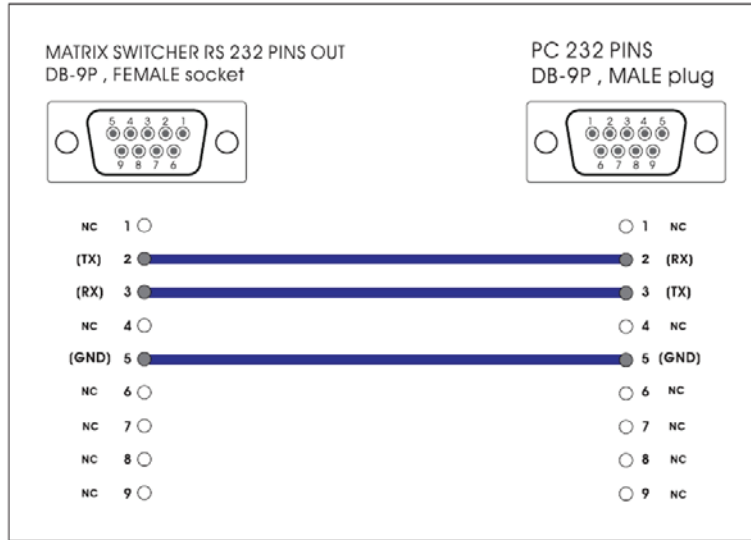


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## RS232 - Cable Pin Lines



Baud Rate : 9600 bps, Data Bit :8 bits, Parity : None, Stop Bit :1 bit

- Each command is terminated with a Carriage Return
- Each feedback is terminated with a Carriage Return
- Code entry is CASE SENSITIVE.
- Do not insert spaces between letter/number code entries.

Note1: Feedback for a command repeats the original command. Example, if x1\$ is a command, the feedback is the same and if the command is x2\$, the feedback would also be x2\$.

Note2: If command fails, the feedback should be "Command FAILED".

## PROTOCOL COMMANDS

Command	Description	Feedback
PWON	Power ON	PWON
PWOFF	Power OFF	PWOFF
All#	Reset all input signals to matching output. (Input 1 to Output 1, Input 2 to Output 2, etc...)	All#
x1\$	Switch OFF specified output channel [1]. If Output channel is 2 the command would be x2\$	x1\$
x1AVx2	Switch specified input to output. If input is 5 and output is 3, then command would be x5AVx3	x1AVx2
x1AVx2,x3,x4	Switch specified input to multiple outputs. If input is 5 and outputs are 6, 7, 8, then the command would be x5AVx6,x7,x8	x1AVx2,x3,x4
Statusx1	Display input currently routed to specified output. Example Statusx1 is asking what input is currently being routed to Output # 1	x7AVx1
Status	Display current routing for all inputs and outputs	x1AVx1, x2AVx2, x3AVx4, x5AVx8, ...
Save[Y]	Save the current routing to a preset command [Y]. [Y] ranges from 0 to 9	Save2
Recall[Y]	Recall the preset command [Y]. [Y] ranges from 0 to 9	Recall2
Clear[Y]	Clear the preset command [Y]. [Y] ranges from 0 to 9	Clear2
Mreset	Reset device to manufacture default	Mreset

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# Safety Information

## Safeguards



To reduce the risk of electric shock, do not expose this product to rain or moisture



If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.



Do not modify the wall plug. Doing so will void the warranty and safety features.



This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

## Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and not cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-COMP-42M. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.



## Warranty

### Limited Warranty

Atlona Technologies warrants that (a) its products (the AT-COMP-42M) will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to customers that fall within those areas.

### Customer Remedies

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

### No other warranties

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product and any related written materials. This Limited Warranty gives customer specific legal rights. Customers may have other rights depending on the jurisdiction.

### No liability for damages

To the maximum extent permitted by applicable law, in no event shall Atlona Technologies or its suppliers be liable for any damages arising out of the use of or inability to use this product, even if Atlona Technologies has been advised of the possibility of such damages. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss. Atlona Technologies' and its suppliers' entire liability under any provision of this agreement shall be limited to the amount actually paid by you for the product. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

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### Atlona Product Registration

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

**To register go to:** <http://www.atlona.com/registration>